

**Amendments to the Claims:**

Please replace the claims in the application with the following claims:

1-52. (cancelled)

53. (new) An isolated *Ornithobacterium rhinotracheale* protein or an isolated immunogenic fragment thereof, wherein said protein or said immunogenic fragment induce both a protective homologous immune response and a protective cross-reactive immune response.

54. (new) The protein or immunogenic fragment of claim 53, wherein said protein or immunogenic fragment is selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 8, SEQ ID NO: 10, SEQ ID NO: 12, SEQ ID NO: 14 and SEQ ID NO: 16.

55. (new) An isolated nucleic acid molecule encoding the protein or immunogenic fragment of claim 54.

56. (new) The nucleic acid molecule according to claim 55, wherein said nucleic acid molecule is selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 9, SEQ ID NO: 11, SEQ ID NO: 13, and SEQ ID NO: 15.

57. (new) The nucleic acid molecule according to claim 55, wherein said nucleic acid molecule hybridizes under stringent conditions to a member of the group consisting of SEQ ID NO: 1, SEQ ID

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NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, SEQ ID NO: 9, SEQ ID NO: 11, SEQ ID NO: 13, and SEQ ID NO: 15.

58. (new) A DNA fragment comprising the nucleic acid according to claim 55.

59. (new) A recombinant DNA molecule comprising the nucleic acid according to claim 55 under the control of a functionally linked promoter.

60. (new) A live recombinant carrier comprising the nucleic acid according to claim 55.

61. (new) A host cell comprising the nucleic acid according to claim 55.

62. (new) A vaccine for combating *Ornithobacterium rhinotracheale* infection, wherein said vaccine comprises the protein or fragment of claim 53, and a pharmaceutically acceptable carrier.

63. (new) The vaccine of claim 62, further comprising an adjuvant.

64. (new) The vaccine according to claim 62, wherein said vaccine comprises an additional antigen derived from a virus or micro-organism pathogenic to poultry, an antibody against such an antigen or genetic information encoding said antigen.

65. (new) the vaccine according to claim 64, wherein said virus or micro-organism pathogenic to chickens is selected from the group consisting of Fowlpox virus, Infectious Bronchitis virus, Infectious

Bursal Disease (Gumboro), Marek's Disease Virus, Chicken Anaemia agent, Avian Reovirus, *Mycoplasma gallisepticum*, Turkey Rhinotracheitis virus, *Haemophilus paragallinarum* (Coryza), Chicken Poxvirus, Avian Encephalomyelitisvirus, Duck Plague virus, Newcastle Disease virus, Egg Drop syndrome virus, Infectious Laryngotracheitis virus, Herpes Virus of Turkeys, Eimeria species, *Ornithobacterium rhinotracheale*, *Pasteurella multocida*, *Mycoplasma synoviae*, *Salmonella* species and *E. coli*.

66. (new) A vaccine for combating *Ornithobacterium rhinotracheale* infection, wherein said vaccine comprises the nucleic acid molecule of claim 55, and a pharmaceutically acceptable carrier.

67. (new) The vaccine of claim 66, further comprising an adjuvant.

68. (new) A vaccine for combating *Ornithobacterium rhinotracheale* infection, wherein said vaccine comprises antibodies against the protein or fragment of claim 53, and a pharmaceutically acceptable carrier.

69. (new) The vaccine of claim 68, further comprising an adjuvant.